BOOSTING RESISTANCE OF SHRIMP POSTLARVAE AGAINST STRESS AND DISEASE

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INTRODUCTION

The current economic challenges put pressure on shrimp producers. The first reflex is often to switch to low-end feeds to cut costs. This practice reduces PL quality and resilience and puts culture success at risk during hatchery-, nursery- and grow-out, especially considering EMS and WFS disease challenges.

A temporary compromise needs to be put forward to help farmers surpass the current economic challenges.

APPROACH

The proposed cost-beneficial approach is to replace 15-30% of the feeding regime with **Sano™** S-PAK health booster, packed with nutraceuticals and essential nutrients to upgrade the protocol quality.



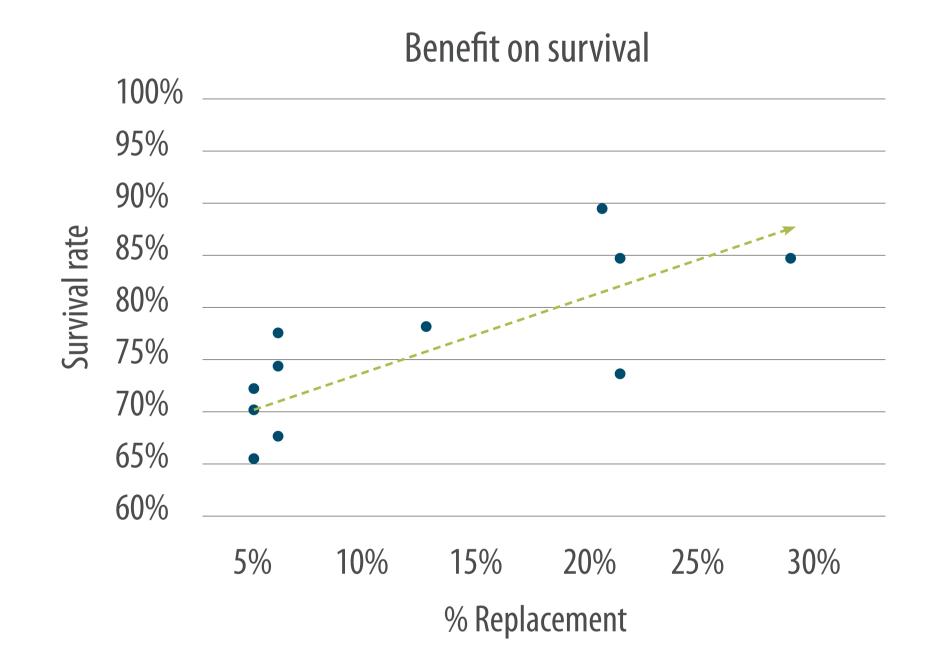


RESULTS

Sano™ S-PAK was evaluated during commercial culture of L. vannamei in six 17-MT tanks stocked with 200,000 postlarvae stage PL12. After 23 days of culture, the treatment with booster feed supplementation resulted in 6% higher survival and increased biomass with 11% compared to the control treatment.

	Control	Sano™ S-PAK
Survival (%)	85 +/- 3	91 +/- 5
Body weight (g)	0.44 +/- 0.05	0.47 +/- 0.04
Biomass (kg)	75 +/- 9	83 +/- 3

The benefit of **Sano**™ S-PAK on survival rate is further confirmed by a meta-analysis of nursery data from Thailand and Vietnam.



CONCLUSIONS

The holistic approach of **Sano™** S-PAK booster is built on the 4 principles below:

- Immune stimulants prepare the shrimp for dealing with stress and infection
- Antioxidants protect immune cells, enhance osmotic regulation, and ensure high survival
- Structural components of cell membranes alleviate the negative effect of stress on growth and ensure fast recovery
- Premium protein sources and attractants ensure good palatability, digestion, and growth under stressful conditions

Sano™ S-PAK improves protocol quality with subsequent positive effects on culture performance







